Abstracts

Measurement of Dielectric Constant and Loss Tangent in Materials Having Large Dielectric Constants (Correspondence)

J.B. Horton and G.A. Burdick. "Measurement of Dielectric Constant and Loss Tangent in Materials Having Large Dielectric Constants (Correspondence)." 1968 Transactions on Microwave Theory and Techniques 16.10 (Oct. 1968 [T-MTT]): 873-875.

The measurement of relative dielectric constant epsilon/sub r/' and loss tangent tan delta in ferroelectric materials at microwave frequencies is made difficult by the large dielectric constant and loss tangents exhibited by these materials. The subject technique, outlined originally by Montgomery and later used for lossy ferroelectric materials by Burdick et al., involves the use of the voltage transmission coefficient for a wave incident on a sample (dielectric slab) whose parallel faces are normal to the direction of propagation.

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